REMARKS

The claims are 1 to 12.

The above amendment is responsive to points set forth in the Official Action.

With regard to the objections to the specification, a brief discussion of the present invention will be of assistance.

According to the present invention as defined in the above-amended claims, the following effects can be obtained (See pages 46-47 of the specification.):

In a foil-decorating sheet comprising a laminate film of two or more kinds of films which is to be set in an injection mold for being integrally bonded too the surface of a molding resin, after a foil-decorating processing is performed, a film of the laminated film which is on the side of the surface to be bonded to the molding resin has a peel strength of not less than 1 kgf/inch width at least at the interface between the surface film of the laminated film bonded to the molding resin and the molding resin, and at least a transparent acrylic film is laminated on the surface film bonded to the molding resin, with a decorative layer formed between the surface film bonded to the molding resin and the acrylic film. This ensures good bonding with the molding resin so that there is no possibility of peeling off from the molding resin.

Further, since the acrylic film which is brittle and liable to crack is supported by the film surface which is bonded to the molding film, the foil-decorating sheet will not be broken.

The method of producing a foil-decorated resin molded article comprises setting in an injection mold the previously three-dimensionally preformed foil-decorating sheet, or three-dimensionally preforming the foil-decorating sheet in the injection mold, so that the foil-decorating sheet and the molding sheet are integrated by injection molding. Therefore, a foil-decorated resin molded article can be easily obtained.

With regard to objection 2. as to the phrase "comprised by", it has been replaced by "comprising".

With regard to objection 3., please note that since the decorative layer is between the acrylic film (or polycarbonate film in claim 2) and the bonding surface-side film is bonded to the molding resin, if the decorative layer is a film, then there are three films. But if the decorative layer is not a film, then there are only two layers. Therefore, "a laminated film of two or more kinds of films" is correctly employed in claims 1-3.

With regard to objection 4., the term "sheet" has been inserted after "foil-decorating" in claims 1-3.

With regard to the rejections under 35 U.S.C. 112, claim 1 has been amended responsive to Official Action paragraph 8 and the term "only" is no longer recited.

Claim 2 has been amended responsive to Official Action paragraph 9.

With regard to Official Action paragraph 10, the term "soft" in claim 8 no longer appears.

With regard to Official Action paragraph 11, the terminology in issue has been clarified responsive to the rejection.

Claims 1, 3-6, 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellison et al. (U.S. 5,536,539).

This rejection is respectfully traversed.

Ellison merely discloses a cast sheet or a cast film, but fails to teach or suggest an acrylic film formed by extrusion, specifically, a transparent acrylic film formed by extrusion which comprises acrylic resin as its main component, as now recited. See page 22, line 25 through page 26, line 14 of the specification.

Thus, the rejection on Ellison is untenable.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Otawa et al. (U.S. 4,997,707).

This rejection is also respectfully traversed.

Otawa discloses a molded product composed of a core layer of synthetic resin, an interlayer (I) of polyolefin or polyurethane, an interlayer (II) of polyolefin elastomer, and a surface skin of any one selected from the group of polyamide, polyurethane, and polyester.

On the contrary, in present claim 2, there is defined a foil-decorating sheet comprising the transparent polycarbonate film (1) which comprises (contains) polybutyleneterephthalate resin; and the bonding surface-side film (2) with the decorative layer (2) interposed therebetween. Such foil-decorating sheet can be laminated on the surface of a molded product.

Therefore, there are significant and unobvious differences between the interlayer (II) and the decorative layer (2); and between the surface skin and the transparent polycarbonate film (1), respectively.

Accordingly, Otawa fails to teach or suggest the feature of the present invention in claim 2.

Claims 3-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Spain et al. (U.S. 5,725,712).

This rejection is also respectfully traversed.

Spain discloses a clear coat polymeric material comprising a blend of a fluoropolymer and an acrylic resin in claim 1. That is, Spain merely discloses a blend of a fluoropolymer and an acrylic resin, but fails to teach or suggest a film comprising acrylic resin as its main component.

In contrast, in the present invention, there is defined an acrylic resin which does not include fluoropolymer. Thus, there is a significant and unobvious difference between the present invention and Spain in resins employed.

Moreover, Spain relates to paint coat, the purpose of which is to enhance the weatherablity and thermoformability.

In comparison, the object of the present invention is to improve the thermoformability and heat stability such that under an ambient temperature condition of 110°C, the test specimen exhibits a tensile elongation at break of not less than 150%. That is, it is necessary for the sheet of the present invention to exhibit a tensile elongation at break of not less than 150% under an ambient temperature condition of 110°C. The heat deformation of each of normal resins is 60-80°C for acrylic resin, 60-65°C for polypropylene resin, 40-50°C for polyethylene resin, and 100-150°C for ABS resin, any one of which is thermally deformed under an ambient temperature condition of 110°C.

Therefore, in a case where like Spain, a merely good thermoformable olefin film or ABS film is selected and then acrylic resin is paint -coated thereon and the test specimen of such a film is set in a tensile test machine and then the film is deformed, this results in poor performance in the tensile test.

In contrast, in the present invention, in order to improve heat resistance, without forming the acrylic resin etc. by paint-coating, an acrylic film formed in a separate process is used, and isotactic type polyolefin film having high heat resistance is selected to perform a tensile test under an ambient temperature condition of 110°C.

Thus, there are significant and unobvious differences between the present invention and Spain.

Claim 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellison et al. in view of Ijichi et al. (WO 97/44389) and Gownder et al. (U.S. 5,908,594).

Further, claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellison et al. in view of Paddock (U.S. 4,440,825).

These rejections are respectfully traversed.

The above comments concerning Ellison are applicable to these rejections.

It is apparent that the secondary references cannot overcome the basic deficiencies of Ellison, as discussed above.

No further issues remaining, allowanceof this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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